

ABSTRACT OF THE DISCLOSURE

A surface-modified lipoprotein-like oil-in-water emulsion useful as a blood-pool selective delivery vehicle for lipophilic imaging agents or lipophilic derivatives of water-soluble imaging agents. The blood-pool selective delivery vehicle remains in the blood for several hours, shows very little early hepatic sequestration, and is cleared from the blood within 24 hours. The mean diameter of the oil phase is less than 150 nm which minimizes sequestration by the reticuloendothelial system. The surface of the oil phase is modified with a polyethyl glycol-modified phospholipid to prevent normal interactions with the receptor sites of the hepatocytes. In radiographic imaging, radioactive or stable, synthetic or semi-synthetic polyhalogenated triglycerides, such as 2-oleoylglycerol-1,3-bis[7-(3-amino-2,4,6-triiodophenyl)heptanoate], or lipid soluble derivatives of traditional water-soluble contrast agents, such as aliphatic esters of iopanoic, diatrizoic, and acetrizoic acid, may be incorporated into the lipophilic core of a lipoprotein-like emulsion particle.